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Product datasheet for RC209649

HDAC6 (NM_006044) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HDAC6 (NM_006044) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HDAC6
Synonyms:	CPBHM; HD6; JM21; PPP1R90
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

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>RC209649 representing NM_006044
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
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Protein Sequence:

>RC209649 representing NM_006044
Red=Cloning site Green=Tags(s)

MTSTGQDSTTTRQRRSRQNPQSPPQDSSVTSKRNIKKGAVPRSIPNLAEVKKKGKMKKLGQAMEEDLIVG
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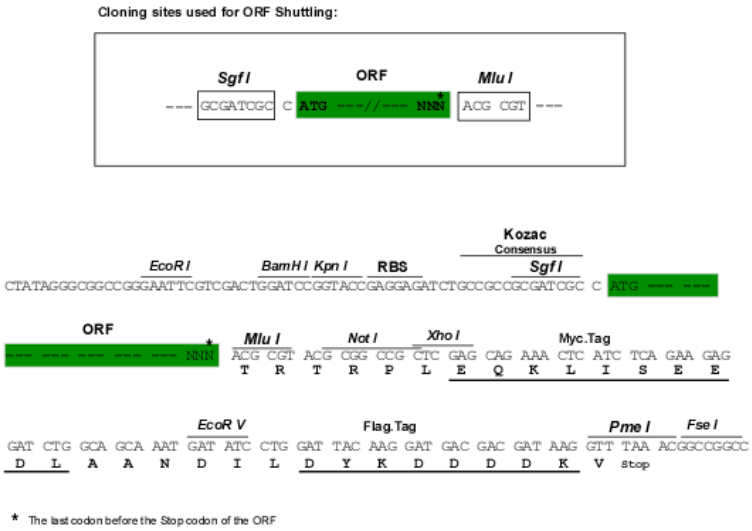
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2657_f01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006044

ORF Size: 3645 bp

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OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_006044.4
RefSeq Size:	4099 bp
RefSeq ORF:	3648 bp
Locus ID:	10013
UniProt ID:	Q9UBN7
Cytogenetics:	Xp11.23
Domains:	Hist_deacetyl, zf-UBP
Protein Families:	Druggable Genome, Transcription Factors
MW:	131.2 kDa

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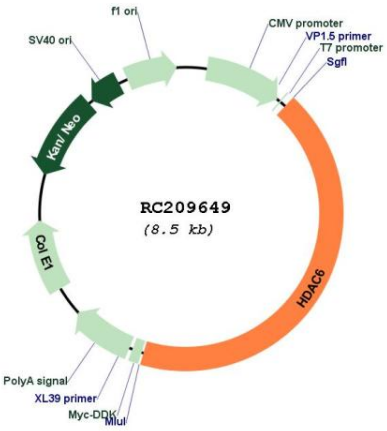
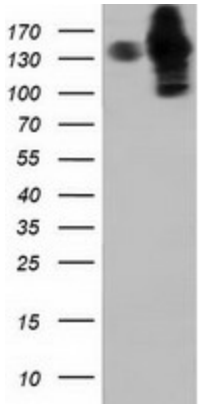
Gene Summary: Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene belongs to class II of the histone deacetylase/acuc/apha family. It contains an internal duplication of two catalytic domains which appear to function independently of each other. This protein possesses histone deacetylase activity and represses transcription. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC209649



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HDAC6 (Cat# RC209649, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HDAC6(Cat# [TA502030]). Positive lysates [LY401822] (100ug) and [LC401822] (20ug) can be purchased separately from OriGene.

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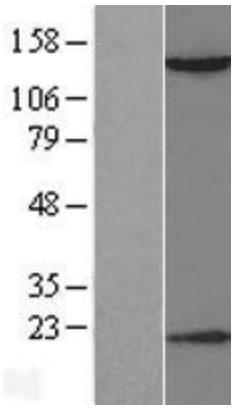
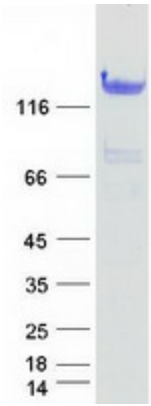


Western blot validation of overexpression lysate (Cat# [LY401822]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209649 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HDAC6 protein (Cat# [TP309649]). The protein was produced from HEK293T cells transfected with HDAC6 cDNA clone (Cat# RC209649) using MegaTran 2.0 (Cat# [TT210002]).

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